DOCUMENT RESUME

ED 166 596 CG 013 205

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TITLE Locus of Control, Social Class, and Learning.
PUB DATE Feb 78
NOTE 25p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Academic Achievement; Disadvantaged Youth; Elementary Secondary Education; *Environmental Influences; *Learning Motivation; Learning Processes; *Locus of Control; *Minority Group Children; *Motivation; *Social Class; Socioeconomic Status

ABSTRACT

The relationship between locus of control, social class, and learning processes were reviewed by analyzing: (1) externality as a function of socioeconomic status, i.e., the lower the status, the greater the degree of externality; (2) the impact of the early home environment on the child's learning and development; (3) classroom and teacher attitudes toward disadvantaged youth; and (4) other factors such as self-reliance, aspiration level, expectancy of success, achievement motivation, intensity of work, affective reaction to reinforcement, performance under skill conditions, and performance on tests. Results suggest a classroom procedure for fostering internality through further examination of cause-effect relationships, aiding children in the formulation of goals in areas of perceived mastery, and providing opportunities for activities requiring internal attribution when success is achieved. (HLM)

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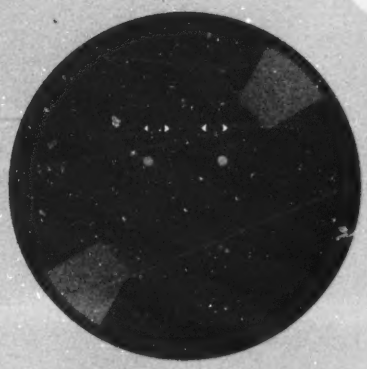

National Dissemination
and Assessment Center
California State University, Los Angeles
Los Angeles, CA. 90032

CG 013 205

Vol. 1 No. 7
February 1978

LOCUS OF CONTROL, SOCIAL CLASS, AND LEARNING

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The subject of this publication was supported in whole or in part by the Office of Education, United States Department of Health, Education, and Welfare. The opinions expressed herein do not necessarily reflect the position or policy of the Office of Education; no official endorsement by the Office of Education should be inferred.

This publication was printed with funds provided by the Bilingual Education Act, Title VII of the Elementary and Secondary Education Act of 1965, as amended by Public Law 93.380.

LOCUS OF CONTROL, SOCIAL CLASS, AND LEARNING

James A. Vasquez

Although it is a relatively new field of study in psychology, locus of control is assuming greater importance each year among educators, particularly those concerned with the education of students of lower socio-economic status (SES). Such students are often from minority backgrounds; and therefore, educators, psychologists, and federal personnel (e.g., civil rights enforcers and legislators) are beginning to examine locus of control to explain the dramatic contrasts in achievement levels between lower SES students and middle and upper SES students.

As defined by leading researchers, locus of control refers to those causes to which individuals attribute their successes and failures. The four major causes or determinants perceived to effect success or failure are ability, effort, task difficulty, and luck (Heider, 1958; Weiner *et al.*, 1972b). Gurin *et al.* (1969) have suggested that other factors such as discrimination and the shortage of jobs may frequently be identified by ethnic minorities in making external attributions.

When individuals believe that their own actions determine the reinforcements that come to them, they are said to be internally oriented with respect to locus of control. Conversely, the external persons are those who do not perceive a relationship between their own actions and the rewards or failures that are found in their

lives. Thus, Rotter (1966) states that "locus of control refers to the self versus environmental responsibility for an outcome."

Two factors probably account for the current high level of interest in this field of study. The first is that research has consistently found that children from lower socio-economic backgrounds almost always score as externals on locus of control tests while middle SES students tend to score as internals. The second factor is that internality is consistently associated with numerous traits that provide the (internal) student with a considerable advantage over externals in learning situations.

Externality in Lower Socio-economic Individuals

There is a considerable body of literature which indicates that externality is a function of one's socio-economic status; that is, lower socio-economic individuals tend to score as externals while higher socio-economic individuals generally score as internals. Lefcourt (1966), for example, suggests that lack of internality may be a by-product of poverty and racial and cultural barriers. Franklin (1963), using a national, stratified sample of 1,000 subjects, found a significant relationship between high SES and internality. Battle and Rotter (1961), using black and white sixth- and eighth-grade students, found a significant social-class correlation with locus of control scores (they controlled for race and IQ). Further, Shaw and Uhl (1971), in a study investigating the relationship between locus of control scores and school achievement (as measured by reading scores), found that lower-class blacks and whites had significantly higher external scores than upper middle-class blacks and whites. Gruen and Ottinger (1969) also found

that middle-class children were more internal than lower-class children, while Jessor *et al.* (1968) found that "internal control expectancies are positively associated with socio-economic status," and that one's access to opportunities in a community is a function of perceived control.

These and numerous other studies give strong support to the belief that locus of control is closely tied to socio-economic status and that individuals whose backgrounds reflect poverty are almost invariably found at the external end of the locus of control continuum; they believe that external forces are largely responsible for what happens to them and have great difficulty in attributing causality to themselves. When one considers what life is like among the poor, this conclusion is intuitively logical. The consequences of this external orientation are most unfortunate, however, particularly in terms of its implications for learning.

Antecedents of Locus of Control

Given the fact that studies consistently show lower SES children to be highly external in the attributions they make regarding success and failure, what can we say about the causes of these unfortunate tendencies? I believe there are two things, both occuring early in the life of a child, which explain why lower SES (and thus most minority) children tend to become external at an early age.

The first factor has to do with early experiences in the home. Many, if not most, of these children witness tremendous effort on the part of both parents toward increasing family income. These children see their fathers working without adequate reward month after month, year after year, at such tasks as field work and other

types of manual labor. They see their fathers go to work sick, because they cannot afford to lose a day's pay. Many children see their fathers physically burning themselves out by age 45. Yet, in spite of all the father's efforts, the family does not break out of the poverty cycle; it remains poor.

Many children also accompany their mothers to an endless series of job interviews. They know the mother is also putting forth every effort to increase the family income, to reduce the intolerable burden of debt. Sometimes the mother acquires work for short periods of time; sometimes she does not. These children view both of their parents working as hard as possible to achieve a higher level socio-economically; but nonetheless, they usually fail. The family remains poor throughout the early childhood of the students. The children, of course, view their parents as capable as anybody else, but the parents' efforts do not pay off in terms of accomplishment.

What happens at this point is tragic. Children in these homes slowly come to the conclusion that effort is not related to achievement. In their circumstances, it is not an illogical conclusion. Their parents, whom these children know and love best and respect the most, work as hard as anybody else; yet that work does not pay off in terms of a higher standard of living. It is therefore natural that the children would conclude that achievement is not related to effort.

Can you imagine what happens to the child when he or she brings this attitude into the classroom? Any child who does not believe that effort in the classroom pays off in terms of accomplishment or

achievement is in for a bad time. He or she will simply not put forth the required effort to learn that other children will.

The second factor affecting achievement in lower SES students is related to the classroom itself. It is clear that these children are different from other children. Many of them are minority children. Thus, they come with differences in skin color, in language or dialect, in value systems, in diet, perhaps even in what they expect from school. These differences are not in themselves deficits; however, when the school cannot accommodate these differences, that is, when the school treats minority students as if there were no differences between them and middle-class Anglo youth, then these differences are converted into deficits. It is ironic that racial and cultural differences, which should be enrichments in a pluralistic school, turn out to be educational deficits in our present schools. Because these children are different and our educational system cannot accommodate or adapt to the differences, the children begin to experience failure. Children fail when they are told their language is not good enough for the school. They fail when their manners are corrected. They fail when their parents are brought in for conferences. Failure in these social areas leads to academic failure as well.

When any of us as adults experiences repeated failure, we have two options: we can either remove ourselves from the context of failure by transferring to another job, leaving the company, moving, and so forth; or we can attribute our failure to outside factors. We can say, for example, that the reason we are not achieving at high levels in our job is because of a grouchy boss, an incompetent

secretary, or a low level of pay.

These children, however, have only one option. They cannot remove themselves from school. By law they are forced to stay in school until age 16, even if it is intolerable. The only option they have is to attribute their failure to external factors. Thus, when lower SES children experience failure, they begin to conclude that the school is responsible for their failure. They will say, "It's not me, it's the teacher who doesn't like me"; "it's not me, it's the counselor who doesn't understand me"; "it's not me, it's the books we use that never talk about anything interesting to me or show anybody who looks like me"; "it's not me, it's the whole system that's against me." This second factor, failure experiences in school, contributes considerably to the development of an external orientation among lower SES children.

According to researchers, when children begin to attribute failure experiences to external factors, they almost always attribute success to external factors as well; that is, they are consistent in their attributions. It is unfortunate that lower SES children attribute virtually all failure experiences to external factors, but it is equally unfortunate, for effective learning, when these children also attribute their success experiences to outside factors.

Because of these two factors, i.e., early childhood experience in the home and subsequent experiences in the school, lower SES children in many cases become so external that they no longer see themselves as responsible for learning. They no longer take credit for their successes nor take responsibility for their failures. Let us now consider the consequences for learning that accompany external tendencies.

Locus of Control and Learning

The effects of locus of control on learning have been investigated from a number of perspectives by many researchers. In sum, we may state outright that virtually all the advantages are on the side of the internal.

For example, Crandall *et al.* (1965) and McGhee and Crandall (1968) found a positive relationship between internality, achievement striving, and academic performance, while Weiner (1972a) states that (internal) causal attributions influence the likelihood of undertaking achievement activities, intensity of work at those activities, and the degree of persistence a student may demonstrate in the face of failure. Further, the Coleman *et al.* Report (1966) states that at all grade levels studied, the Mexican-American students' belief in their ability to control or influence their environment was the attitudinal item most highly related to achievement (Mayeske, 1968). Locus of control also explained more variance among Black students in the Coleman study than any other measure (Gurin *et al.*, 1969). What these studies all seem to indicate is that the degree to which an individual excels as a student (no matter what the areas of assessment are) is in part a function of how internal the student is.

Locus of control affects learning in many ways. Eight of these areas are discussed to some extent.

1. Self-Reliance

Tseng (1970), in a study of 140 vocational rehabilitation clients, found that internals scored significantly higher than externals in self-reliance. The scoring pattern has clear implica-

tions for the classroom, where students are expected to work as independently as possible in completing their assignments. Externals, it appears, are more dependent on others in completing their assigned tasks. It seems evident that the tendency of internals to rely more on themselves gives them a notable advantage over externals in classroom situations.

2. Level of Aspiration

In a study of high school students, Franklin (1963) found that those who intended to go to college were more internal than high school students randomly selected from the population. It is intuitively apparent that individuals who believe they have some kind of control over their own reinforcements are in a position to develop strategies that will assure them of receiving the reinforcements they desire; that is, they will make plans for the future. External individuals, however, since they see little or no relation between their own actions and the reinforcements and punishments that come into their lives, tend not to make plans at all.

3. Expectancy of Success

Frieze and Weiner (1971) have shown that the ability to attribute causality internally is imperative if one's expectancy of success on a future task is to be increased. In particular, when the student has immediately experienced success on a given task, these researchers say, attribution by the individual to the internal trait of ability will increase expectancy of success on a future, similar task. Conversely, if the individual has just experienced failure on a task, attribution to the internal trait of effort, as opposed to ability, will at least allow him or her to keep on trying in

spite of the failure. Since the failure was attributed to a trait (effort) that may fluctuate from task to task, the individual is not so discouraged by the failure as he or she would be had it been attributed to a stable trait such as ability. In each of these cases, however, the individual must be able to make an internal attribution in order to maintain or increase expectancy of success on future tasks. Externals, who find it difficult to attribute either success or failure experiences to themselves, will generally not have as high an expectancy of success as individuals who are able to attribute failure experiences internally to low effort, and success experiences internally to ability.

4. Achievement Motivation

The degree to which students are motivated to achieve appears to be linked to the degree to which they are internally oriented. Various researchers hold that the more internal one is, the greater will be one's desire for achievement, since attributions of success that are made to oneself are more satisfying than those made to external factors. In fact, so closely are internality and achievement motivation linked in the minds of some researchers, that Weiner *et al.* (1969) specifically define persons with high achievement motivation as those who are disposed to attribute success internally. A number of studies support the view that the students' achievement motivation is a function of the degree to which they are internal in their locus of control. Reimanis (1970), for example, reports that externality appears to interfere with one's efforts to increase achievement striving in the classroom. Additionally, McClelland *et al.* (1953), Atkinson (1958), and Crandall

(1963) all suggest that people who demonstrate high need for achievement are likely to have some belief in their own ability or skill to determine the outcome of their efforts.

5. Intensity of Work

In addition to affecting the degree of motivation with which one will work at activities, locus of control also appears to affect the intensity with which one works (Weiner, 1972a). This may reflect the fact that self-concept is more involved in the case of internals, as compared to externals. Since external individuals tend to believe that there is no causal relation between their actions and subsequent events that happen in their lives, it is not likely that they will reflect on their behaviors as either successful or unsuccessful. Behavior, for the external, tends to be conformist in nature. The self-concept is not involved. Internals, however, are highly ego-involved since they believe, rightly or wrongly, that nearly everything that happens to them is a direct consequence of their own actions. Their self-concepts are enhanced by success experience and are threatened by an experience of failure. They will, therefore, work more intensely at effecting those types of reinforcements that are most rewarding to them.

6. Affective Reaction to Reinforcement

Locus of control affects the learning process in another interesting manner, for it is believed that one's affective reaction will be higher or lower depending on whether one attributes success and failure internally or externally (Weiner *et al.*, 1972b). Internal aspirations, it is believed, intensify emotional responses. Thus, greater pride is felt if one has attributed success internally,

that is, to one's own ability or effort, as opposed to external variables such as luck or other people. Conversely, if failure has been attributed internally, greater shame will be felt by the individual. Numerous studies have confirmed this intuitively logical observation (Lanzetta and Hanna, 1969; Leventhal and Michaels, 1971; Weiner and Kukla, 1970).

The inability of external students to respond affectively to the teacher's efforts to reinforce them is of considerable importance. Reinforcement, as a matter of fact, may be the most powerful tool we have for motivating learners and shaping desired behavior. Unfortunately, it tends to be ineffective with external students. When the teacher tells Mary she did well on her paper, Mary, being an external, does not believe she did well, but rather attributes her success to an external factor. Thus Mary is robbed of the opportunity to enjoy the feeling of success.

7. Performance Under Skill Conditions

Keller (1971) has shown that internal students greatly prefer to work under conditions in which outcomes are determined by skill rather than by chance. Not only do they prefer these working conditions, but they perform better under them. The relevance of this observation to the classroom is obvious. Supposedly, learning occurs in the classroom under conditions requiring skills; it is not a matter of chance. Knowledge is presumably acquired as the student puts forth effort in comprehending the lesson and in practicing drills that are a part of the lesson. Learning is thus not a matter of luck or chance. Understandably, internals prefer performing under these skill conditions rather than under chance

conditions, since skill conditions presumably allow the individual who believes he/she can affect the environment the opportunity to do so. In sum, since learning is mediated under skill conditions as opposed to chance conditions, and since the internal prefers these working conditions while the external does not, it is clearly advantageous to be an internal in our classrooms today.

8. Performance on Tests

Finally, it appears that locus of control discriminates among students in the very important area of test-taking. In a recent study (Gozali *et al.*, 1973), investigators gave 63 university students a locus of control test and a verbal ability test. They found a linear relationship between internality and time utilization. Test items had been previously rated in terms of how difficult they were. Some items thus were easier; some were harder. Interestingly, it was found that externals did not take more time for the more difficult items. They appeared to be indiscriminate in the amount of time they took for different items. Internals, however, used time in a manner systematically related to the difficulty of the item. The investigators suggest that these differences may explain why locus of control, although unrelated to I.Q., is a predictor of achievement test scores. It is not clear why internals take more time for more difficult items on tests while externals do not. One may conjecture that internals are able to perceive with greater facility than externals which items are more difficult. Or, since success is more satisfying to internals than to externals, they may take more time on harder items in order to be assured of successful outcomes. Whatever the reasons, internals clearly have

the advantage over externals in the crucial area of test-taking.

To summarize, the studies mentioned above in addition to numerous others have consistently indicated that locus of control is a variable of some magnitude with respect to learning. It seems to be incontestable that internals possess certain traits that give them a notable advantage over externals in learning tasks. Therefore, one of the most important challenges facing educators today concerns the creating of effective classroom environments, or "treatments" to foster internality among external students.

A Classroom Procedure for Fostering Internality

Without doubt, the greatest need practitioners have in working with external students is a treatment to foster internality. Researchers have given relatively little study to ways of increasing the tendency to make internal attributions among external students. Contributing to this state of affairs is the disagreement among psychologists as to whether locus of control orientation can be changed. Those who perceive it as a true personality trait contend that since elements of personality are formed over such lengthy periods of time and by such varied and numerous stimuli, they tend to be highly stable and not likely to be changed by treatments of relatively short duration.

On the other hand, some psychologists treat locus of control as a subject-specific attitudinal variable. These researchers believe that one's perception of control of reinforcements is largely dependent on whether or not one is functioning in an area in which some degree of mastery or competence is perceived.

Thus, an individual will be likely to attribute causality internally subsequent to a successful experience in an area in which he/she considers him/herself somewhat competent, while causality will probably be attributed externally following successful outcomes in areas in which there is no perceived competency. This opens the door to the possibility that if an individual's perception of competence can be increased in a specific area, the number of internal attributions he/she will make in that area may also increase.

The possibility that locus of control orientation can be altered has encouraged a few researchers (Feshbach and Adelman, 1974; Reimanis, 1970; Lefcourt and Ladwig, 1965) to investigate various treatments for increasing the number of internal attributions typically made by external students. Underlying their efforts has been the desire to help low achieving students assume greater responsibility for both their failure and success experiences in school.

In view of the many advantages that internal students have over externals in learning activities, what practical steps can teachers and administrators take to foster internality among external students? On the basis of some research that has been done in this area, three suggestions will be made.

1. Cause-Effect Relationships

Although an understanding of cause-effect relationships is essential to internal attribution of success or failure (Reimanis, 1970), this understanding has not been developed adequately in the external individual because of negative social experiences within the family, within a poverty-level existence, and within a cul-

turally biased classroom. How, then, do we begin to build understanding of cause and effect?

The following four concepts, or principles, provide a framework for building understanding of cause and effect relationships. (The criteria are stated in terms for the teacher or administrator and would have to be put in other words for students.)

The first concept is that to recognize cause-effect relationships is to understand that the cause has sufficient power to produce the effect. To state it another way, we need to help children identify the sufficient condition. A second principle students should comprehend is that without the cause, the action or result would not have occurred. In other words, no result or effect is possible without prior cause. A third element of cause-effect relationships asserts that other equally likely causes must not be present if we are to identify a single cause. The final principle is that the cause must precede the effect in time; there is a temporal relationship between cause and effect. These principles may seem self-evident, but external students need help on an elementary level to begin to understand cause-effect relationships.

In the classroom, it is necessary to start with examples of cuase-effect relationships that can be used to help externals recognize analogous situations in all aspects of life. A student text might include a story of a forest fire, for example. The teacher can point to the fire as an effect and then ask what caused it or why it happened. It is important to begin with familiar events that do not involve people, and use these examples to show that every event has a cause. When children first learn about

cause-effect relationships, it is simpler for them to understand examples that do not involve people.

Once students begin to understand the operation of cause and effect in familiar, naturalistic settings, they can begin looking at human examples. This may be accomplished through the use of vignettes, or very short, simple paragraphs that are accompanied by questions pointing the reader to the cause in the vignette (Frieze and Weiner, 1971). Let us say that the teacher composed his/her own vignettes, five paragraphs, once a week. In each of them, a child is observed in a certain task. What matters is that the reader, the external child, be able to identify why the person in the story succeeded or did not succeed. The student can be prompted by such questions as, "Did Joe try hard enough to succeed in this story?" That question encourages the child to think about the cause-effect relationship: try hard--succeed; don't try hard--maybe not succeed. Another question might be, "Did Betty give up too soon in this story?" thus encouraging thought about the effects of effort and persistence. Still another question could be, "Has John done other things equally difficult before?" If the character is known to have succeeded previously in difficult tasks but is seen to fail this time, then the reader, the external child, can begin to understand that the character has the ability to succeed and that there must be another cause that explains the outcome. Another question might be, "Why did Sally feel good when she finished the task?" This encourages the reader to believe that there is a legitimate relationship between feelings (good or bad) and the outcomes which one experiences. The perception of this

relationship is itself an evidence of growth toward seeing oneself as the responsible agent in learning activities.

Finally, students should be helped to study their own behavior, to systematically identify the reasons things happen to them, i.e., the causes of their failures and their successes.

2. Goal Setting in Areas of Competence

Since one of the things external children need is to experience success, teachers must also aid them in setting goals in areas of perceived mastery (Lefcourt and Ladwig, 1965). As mentioned earlier, people often develop as externals because they have too many failure experiences. For reasons of mental health, they begin to attribute outcomes to external influences. It seems clear that these children need experiences of academic success that make them feel good and thus encourage them to accept the responsibility for those successes. The area of mastery is the most logical place to begin if we are going to assure children of success experiences. Externals are largely underachievers, but there is some area in every child's life in which he/she performs well. The child may not even know where his/her areas of mastery are, but it is our duty as educators to find them. Then we can begin to help the child formulate realistic goals, thus assuring him/her of a reasonable number of success experiences.

3. Activities Requiring Internal Attribution

We still have no guarantee, however, that children will attribute experiences of success to themselves. Thus, a third requirement in this teaching effort, probably the most difficult task of all, is to engage children in activities that require internal

attribution. There are two activities that may be suggested. One such activity is creative tasks. Creativity has such a broad definition that it is difficult to judge in terms of success or failure. Usually the teacher can legitimately say, "That is very creative; I have never seen anything like this"--and the child cannot help but take the credit. By definition, creativity is one's own work. It is almost impossible to attribute a creative product to external causes.

Another activity which requires an internal attribution is peer tutoring. The peer tutor in this case has to be the external child, placed in a tutoring relationship with another child who is having, for example, a problem with math. The tutor, i.e., the external child, can spend some time helping his/her peer. When the session is over and the peer with the problem has learned something, the external child, who has been the teacher in this case, is virtually forced to take the credit. The external child cannot attribute the success to the teacher because the teacher was not directly involved. In fact, the child was the teacher. He/she cannot say the peer being tutored helped him/herself totally, because of the peer's inability for self help. For these reasons, the peer tutoring task requires an internal attribution. There are undoubtedly other methods teachers can use to encourage their own students to attribute success internally.

In summary, then, we suggest that three factors are necessary for the external child to become more internal: understanding cause-effect relationships, experiencing success, and undergoing situations whose outcomes demand internal attribution. Ideally,

activities should be chosen that meet both of the latter two criteria simultaneously; that is, these activities should require internal attribution and concurrently offer a high probability of success to the student.

Conclusions

It is not difficult to understand why Coleman *et al.* (1966) found that students' perceptions of their ability to control or influence their environments were so highly related to achievement among lower SES students. (Coleman found locus of control was twice as powerful as any other variable in predicting school achievement.) The facts are these:

- The great majority of lower socio-economic students achieve at lower-than-average levels academically.
- The great majority of lower socio-economic students assessed by locus of control instruments score as externals.
- In comparison to internal students, external students tend to lack many traits that are important to effective learning.

Educational issues are being debated by legislators in every state and in Washington, D.C. daily; innovative programs are being implemented and evaluated in nearly every state; and millions of dollars are spent every month to improve educational opportunities for lower SES children. One wonders whether any strategy will be effective until these children are taught to believe in themselves again.

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